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(12)

#### **EUROPEAN PATENT APPLICATION**

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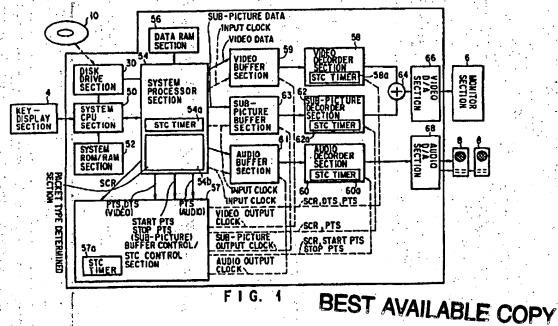
- (84) Designated Contracting States:
  DE FR GB NL
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- (71) Applicant:

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- (54) Recording medium, apparatus and method of recording data on the same, and apparatus and method of reproducing data from the recording medium
- (57) In an apparatus and method of reproducing a data unit consisting of a stream of packs of main picture data, a data unit consisting of a stream of packs of audio data, and a data unit consisting of a stream of packs of sub-picture data, which recorded on an optical disk (10) and which are reproducible in the same time slot, reproduction data of the data unit including the sub-picture data is reproduced is reproduced by a sub-picture decoder section (62) after reproduction data of the data

unit including the audio data and reproduction data of the data unit including the video data are simultaneously reproduced by a video decoder section (58) and an audio decoder section (60), and after the reproduction data of the data unit including the sub-picture, the reproduction data of the data unit including the audio data and the reproduction data of the data unit including the video data are simultaneously reproduced again.



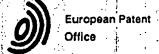
730 272 A3



#### **EUROPEAN SEARCH REPORT**

Application Number EP 96 10 3001

A	EP 0 521 487 A (SONY CORP) 7 January 1	Relevant to claim  993 1.2.7, 12.13, 18.19, 24.25, 30.31, 36.38, 43.45, 50.52, 57,59, 64.65,	G11B20/12 G11B27/32 G11B27/10 G11B27/034 G11B19/02 H04N5/92 H04N5/93 H04N9/82 H04N5/85
A		12,13, 18,19, 24,25, 30,31, 36,38, 43,45, 50,52, 57,59,	G11B27/32 G11B27/10 G11B27/034 G11B19/02 H04N5/92 H04N5/93 H04N9/82
A		12,13, 18,19, 24,25, 30,31, 36,38, 43,45, 50,52, 57,59,	G11B27/32 G11B27/10 G11B27/034 G11B19/02 H04N5/92 H04N5/93 H04N9/82
		18,19, 24,25, 30,31, 36,38, 43,45, 50,52, 57,59,	G11827/10 G11827/034 G11819/02 H04N5/92 H04N5/93 H04N9/82
		24,25, 30,31, 36,38, 43,45, 50,52, 57,59,	G11B27/034 G11B19/02 H04N5/92 H04N5/93 H04N9/82
		30,31, 36,38, 43,45, 50,52, 57,59,	G11B19/02 H04N5/92 H04N5/93 H04N9/82
		36,38, 43,45, 50,52, 57,59,	H04N5/92 H04N5/93 H04N9/82
		43,45, 50,52, 57,59,	H04N5/93 H04N9/82
		50,52, 57,59,	H04N9/82
		50,52, 57,59,	
		57,59,	
			G09B5/06
		70 71 76	//G11B7/00
		70,71,70	7741107700
	* the whole document *	·	;
A	PRESTON J.M.: "Compact Disc-Interact	ve: 1,2,7,	
" i	A Designer's Overview"	12,13,	
	1991 , KLUWER , NL, DEVENTER XP0020918	356 18,19,	
J	1331 , KLUNCK , INC., DETERRICK NI COLUMN	24,25	
		30,31,	
_ ; <b> </b>		36,38,	
· ·		43,45,	1
		50,52	TECHNICAL FIELDS : SEARCHED (Int.C16)
!		57,59,	ACRUSING MINISTER
		64,65,	G11B
, 1		70,71,76	HO4N
	* page 61 - page 108 *		G06F
	hade or hade ree		G09B
	WO 94 10664 A (KIM YOUNG SUN :KIM YOU	NG 1,3,5,7,	•
Α .	INT AND THE TOOL WILL LINE TOOL	13.19.	
	MIN (KR)) 11 May 1994		
!		25.31.	
		38,45,	. !
		52,59,	
		65,71,78	
	* the whole document *		. :
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	The present search report has been drawn up for all claims		
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	THE HAGUE 1 February	1999   089	almans, F
	CATEGORY OF CITED DOCUMENTS T: theory	or principle uncertying the patent document, but pub	invertion
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Y:pa	articularly relevant a combined with another D: docum	nent cried in the approachor	
doc	current of the same category L.; docum chnological background	ent ated for other research	



#### **EUROPEAN SEARCH REPORT**

Application Number 96 10 3001

Category		indication, where appropriate,		Relevant	CLASSIFICATION OF THE
	of relevant pa			to claim	APPLICATION (Int.Cl.6)
A	PATENT ABSTRACTS O			1,3,5,7,	
1 1 1		(P-1555), ll June 1		13,19,	
		(MITSUBISHI ELECTRI		25,31,	
	CORP), 5 February	1993	· [:	37,38,	
				44,45,	
- 1	医大头菌囊 自己的病	: '	· [	51,52,	
			!!	58,59,	
			: (	55,71,	
• • • •		•	. );	77,78,84	
	* abstract *				
	* &JP 05 027730 A:	figures 1-6 *:		· .	
	1				
A	WO 93 03453 A (BRO	DERBUND SOFTWARE IN	ic) li	1,3,7,	
	18 February 1993			13,19,	
. [		•		25,31,	
-				38,45,	
				52,59,	
				55,71,78	
	* the whole docume	nt *	[		
3 3				∵ · _ [	
P,A	EP 0 644 692 A (K.	K.TOSHIBA) 22 March		l,2,7, l2,13,	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
				18,19,	
				4,25,	
		<i>:</i> ·		30,31,	
		• • •		36,38,	
				13,45	
				50,52	
				57,59,	
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				70,71,76	
	* the whole docume	nt.*	['	3,,,,,,	
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	THE HAGUE	1 February			mans, F
	ATEGORY OF CITED DOCUMENT	E : earlier	patent docui	inderlying the in ment, but publis	wention hed on, or
	cularly relevant if taken alone cularly relevant if combined with an		ne Wing date nent cited in t	he application	
docu	ment of the same category	L docum	ent cited for	other reasons	
A ; tech	nological background written disclosure			e patent family,	
	mediate document	docum		parera ramayı	· · · · · · · · · · · · · · · · · · ·

#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 96 10 3001

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on.

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01-02-1999

į.		•		01 02 13
Patent documen cited in search rep			Patent family member(s)	Publication date
EP 0521487	A 07-01-1	1993 JP JP DE DE US	5012804 A 5012831 A 69222235 D 69222235 T 5715224 A	22-01-1993 22-01-1993 23-10-1997 15-01-1998 03-02-1998
WO 9410664	A 11-05-	1994 AU CN KR	5377494 A 1086339 A 9612402 B	24-05-1994 04-05-1994 20-09-1996
WO 9303453	A 18-02-1	1993 AU EP	2419092 A 0576628 A	02-03-1993 05-01-1994
EP 0644692	A 22-03-	1995 JP JP DE DE DE EP EP	7087443 A 7130102 A 69408237 D 69408237 T 69414275 D 0790739 A 0790743 A	31-03-1999 19-05-1999 05-03-1998 27-08-1998 03-12-1998 20-08-1997
:. 		US	5715356 A	03-02-1998
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